Amendments to the Drawings

The attached sheet of drawings includes changes to Fig. 1. The sheet includes Figs. 1-2, and replaces the original sheet (1 / 3). Fig. 1 has been amended to identify all features of the invention.

Attachment: Replacement Sheet 1 / 3

REMARKS

The specification, claims 1-13, abstract, and drawings are amended herein. Claims 1-13 remain pending in the captioned case. Further examination and reconsideration of the presently claimed application are respectfully requested.

Objection to the Abstract

An objection was lodged against the abstract for being too short. In response thereto, the abstract has been amended in a manner believed to obviate this rejection. Accordingly, Applicants respectfully request removal of this objection.

Information Disclosure Statement

Notice was given regarding several patents cited in the body of the specification, but that had not been cited in an Information Disclosure Statement. In response thereto, an Information Disclosure Statement is filed herewith in a separate paper citing references related to the present application.

Objection to the Drawings

An objection was lodged against the drawings for failing to illustrate every feature of the claimed invention. In response thereto, Fig. 1 has been amended in a manner believed to obviate this rejection. Accordingly, Applicants respectfully request removal of this objection.

Objection to the Claims

Objections were lodged against the claims for various informalities. In response thereto, claims 1-13 have been amended in accordance with the Examiner's suggestions are are believed to obviate the objections. Accordingly, Applicants respectfully request removal of these objections.

Section 112 Rejection

Claims 3 and 10 were rejection under 35 U.S.C. § 112, second paragraph, as being indefinite. In response thereto, claims 3 and 10 have been amended in a manner believed to obviate this rejection. Accordingly, Applicants respectfully request removal of this rejection.

Section 102 Rejection

Claims 1, 4, 6, 13, and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,592,555 to Stewart (hereinafter "Stewart"). The standard for "anticipation" is one of fairly strict identity. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art of reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP 2131. Furthermore, anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, as arranged in the claim. *W.L. Gore & Assocs. V. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). Using these standards, Applicants submit the cited art fails to disclose each and every element of the currently pending claims, some distinctive features of which are set forth in more detail below.

Stewart does not teach or suggest (i) a control unit for controlling pseudo random values or random values transmitted at times other than the first time interval at which the digital signals are transmitted (claim 1), (ii) at times between substantially all of the first digital signals (claim 12), or (iii) at times within substantially all intervals between the first digital signals (claim 13). Each of the current independent claims recite a first unit having a data transmitter and a second unit having a data receiver. The first unit transmits digital signals combined with pseudo random values or random values. The purpose for placing values within the digital signal is to, for example, minimize electromagnetic emissions in cable-bound paths (Specification -- pg. 2, lines 1-3; pg. 3, lines 1-5 and 21-24). By carefully placing the values within the digital signals, the electromagnetic properties are substantially improved. However, emphasis is on the careful placement of those values. In particular, each of the independent claims recite a control unit that controls such placement. The control unit places the values at times other than the

first intervals (when the digital signals are true) (claim 1), between substantially all of the first digital signals (claim 12), and in substantially all intervals between the first digital signals (claim 13).

The features of independent claims 1, 12, and 13 are clearly illustrated in, for example, the specification and Fig. 2. Fig. 2 illustrates the digital signal 20 occurring in the darkened time regions. Whenever the digital signal is not present (i.e., in the intervals between the digital signals), pseudo random values or random values 21 occur. Values 21 are combined with the digital signal 20 via a control unit to arrive at the benefits shown in Fig. 6 (Specification -- Figs. 2, 6).

Contrary to claims 1, 12, and 13, Stewart does not present, teach, or suggest to combine pseudo random values or random values at times other than when digital signals are present, or at times between substantially all of the digital signals as presently claimed. Instead, Stewart teaches a communication system not used for reducing EMC, but for enciphering and deciphering digital signals in a digital signal processor (DSP). Instead of FIFO buffer 70 being a pseudo random generator as asserted on page 6 of the Office Action, FIFO buffer 70 of Stewart is merely a shift register for shifting or delaying signals with signals coming from multifunction pin multiplexing unit 56 via serial port 64.

Not only is FIFO shift circuit 70 of Stewart not a pseudo random generator or random generator, but nowhere in Stewart is there any mention of placing the outcome from shift circuit 70 at times between enciphered signals arising from serial port 64. In fact, Stewart provides no motivation for its modification or a skilled artisan's belief that such a claimed result could occur when reading Stewart. Certainly, there are no timelines which illustrate filling gaps between digital signal intervals as presently claimed. Instead, the only timeline is that showing a frame synch pulse 150 arriving at the leading edge of when DSP 96 produces a busy signal 160 (Stewart -- col. 6, lines 38-55; Fig. 4). The enciphering/deciphering timing diagram 154 does not derive from the alleged pseudo random generator; instead, it simply indicates when a change occurs between when the DSP 96 is busy or idle. Nowhere in the enciphering/deciphering timing diagram 154 is there any indicating that the shown pulses represent pseudo random values, much less derive from a pseudo random generator or random generator. Therefore, the ensuing result of decreasing EMC and reduction in the output signal spectrum amplitude (illustrated in present Fig. 6) would in no way

avail itself in the teachings of Stewart, which is clearly geared toward solving an entirely different problem of enciphering/deciphering.

For at least the reasons set forth above, Applicants believe independent claims 1, 12, and 13, as well as claims dependent therefrom, are not anticipated by Stewart. Accordingly, removal of this rejection is respectfully requested.

Section 103 Rejection

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Stewart. Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Stewart in view of U.S. Patent Application Publication No. 2002/0053062 to Szymanski (hereinafter "Szymanski"). Claims 5, 7, 8, and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stewart in view of U.S. Patent No. 5,793,318 to Jewett (hereinafter "Jewett"). Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Stewart, Jewett, and U.S. Patent No. 5,007,088 to Ooi (hereinafter "Ooi"). Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Stewart, Jewett, Ooi, and U.S. Patent No. 4,835,517 to Van der Gracht (hereinafter "Van der Gracht").

Dependent claim 2 is patentably distinct over Stewart for at least the same reasons as its base claim 1 discussed above, nor can Stewart be combined with Szymanski to arrive at the limitations of dependent claim 2.

Dependent claims 5, 7, 8, and 9 are patentably distinct over Stewart for at least the same reasons as their base claim 1 discussed above, nor can Stewart be combined with Jewett to arrive at the limitations of dependent claims 5, 7, 8, and 9.

Dependent claim 10 is patentably distinct over Stewart for at least the same reasons as its base claim 1 discussed above, nor can Stewart be combined with Jewett and Ooi to arrive at the limitations of dependent claim 10.

Dependent claim 11 is patentably distinct over Stewart for at least the same reasons as its base claim 1 discussed above, nor can Stewart be combined with Jewett, Ooi, and Van der Gracht to arrive at the limitations of dependent claim 11.

For at least the reasons set forth above, Applicants believe dependent claims 2, 5, and 7-11 are patentable over the cited art. Accordingly, removal of this rejection is respectfully requested.

CONCLUSION

The present amendment and response is believed to be a complete response to the issues raised in the Office Action mailed April 27, 2007. In view of the amendments and remarks presented herein, Applicants assert that pending claims 1-13 are in condition for allowance. If the Examiner has any questions, comments or suggestions, the undersigned attorney earnestly requests a telephone conference.

No fees are required for filing this amendment; however, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment, to Daffer McDaniel, LLP Deposit Account No. 50-3268.

Respectfully submitted,

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Customer No. 35617
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